

- 1. A computer mouse for manipulating by the right hand of a user to control the operation of a computer, comprising a handheld unit, a base holder and its hookup software. The handheld unit is operated solely by a user's right thumb when handheld. When the handheld unit is placed on the base holder, it can function as a regular touchpad mouse. The mouse can simulate keyboard inputs when the user touches on the touchpad surface on the top of the said handheld unit, by right thumb when handheld;
- 2. The handheld unit of Claim 1 further comprises a touchpad, a housing holder and mouse buttons;
- 3. The handheld unit of Claim 1 is small enough to be held in a user's right hand in grasping grip;
- 4. The handheld unit of Claim 1 is of elliptic shape (Figure 1);
- 5. The handheld unit of Claim 1 is of credit card shape;
- 6. The handheld unit of Claim 1 can be operated solely by a user's right thumb;
- 7. The handheld unit of Claim 1 can have small flat or intruded buttons, located in front of the said touchpad;
- 8. The handheld unit of Claim 1 is connected to its computer through a regular cable;
- 9. The handheld unit of Claim 1 is connected remotely to its computer, through RF signals and IR signals;
- 10. The method that the hookup software works as an interpreter between the said touchpad input signals and the connected computer's operating system. The software intercepts the signals and recognizes them either as regular mouse signals or keystroke signals;

- 11. The method that the hookup software processes handwriting stroke's information without the knowledge of absolute location of thumb movement on the said touchpad;
- 12. The method that the additional part of the mouse, the base holder unit, is separated from the core movable part, the handheld unit, allowing the flexibility of either being used as handheld or as a regular touchpad mouse;
- 13. The method that uses the sequence of handwritten stroke information as inputs to the recognition software component.